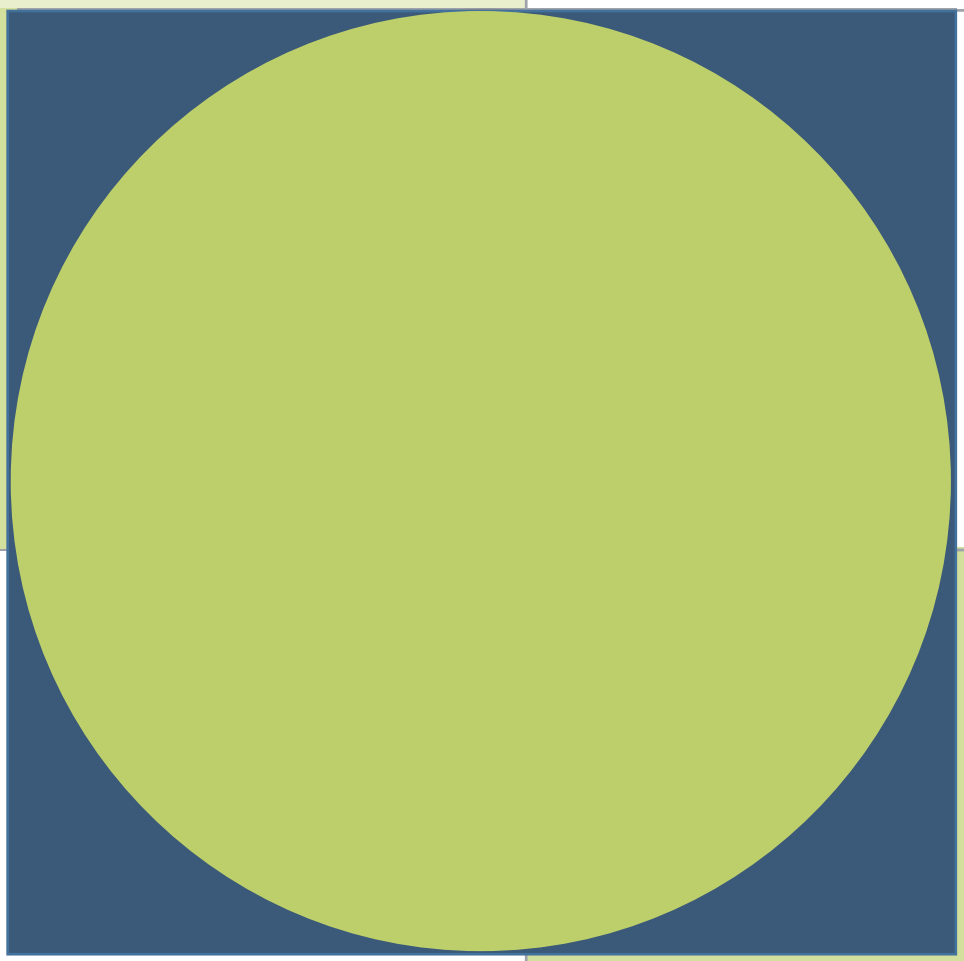
Measurement of Full Method Choice:

Assessment of method availability in Bangladesh



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Abbreviations

BDHS	Bangladesh demographic and health survey
BHFS	Bangladesh health facility survey
D4I	Data for Impact
DHIS2	district health information software 2
DHS	demographic and health survey
ECP	emergency contraceptive pill
FP2020	Family Planning 2020
FP/RH	family planning/reproductive health
IUD	intrauterine device
LARC	long-acting reversible contraceptives
NGO	nongovernmental organization
PM	permanent method
PMA	performance monitoring for action
SDP	service delivery point
SPA	service provision assessment
USAID	U.S. Agency for International Development
WHO	World Health Organization

Introduction

Research has shown that women's ability to choose from a full range of contraceptive methods encourages consistent and effective contraceptive use, leads to positive reproductive health outcomes, and helps prevent reproductive coercion (Sonfield, 2017; Samuel, Fetters, and Desta, 2016). The provision of a wide range of methods is thus an important measure of service quality and a principle of a rights-based approach to family planning.

One of the most-used metrics for method availability relates to the contraceptive options that are available to clients at family planning service delivery points (SDPs). Having available a wide range of contraceptive options to clients is understood to indicate that programs can meet the diverse family planning needs of women and couples throughout their lifetimes, and that choices won't be constrained by a lack of available methods (Stephenson et al., 2008; Darroch, Sedgh, Ball, 2011).

Method availability is typically assessed using data from health facility surveys, such as those produced by the Service Provision Assessment (SPA) supported by the Demographic and Health Survey (DHS) Program, the Performance Monitoring for Action (PMA) project funded by the Bill & Melinda Gates Foundation, the World Health Organization (WHO) Service Availability & Readiness Assessments (SARA), or through routine health information systems. Despite the importance of the indicator, the definitions used for calculation are not standardized. Method availability indicator guidelines vary, and researchers often develop their own definitions of the indicator. Furthermore, the interpretation of method availability is not clear. There is no consensus or guidance on what constitutes a "wide range," "full range," or "broad mix" of methods, though all these terms are used. For example, the Bill & Melinda Gates Foundation-funded Full Access Full Choice project flagged the indicator for "percentage of facilities offering a full range of methods" as lacking a clear definition and noted that it was a challenge affecting standardization across project implementation sites (FAFC, 2020).

This study was designed to assess common measures of method availability within a country context, including the consequences of using various definitions and data to determine the minimum acceptable range (number and/or mix) of methods and how well they capture differences by urban/rural and regional locations, in order to make recommendations for measurement and indicator standardization. The assessment uses recent SPA and routine data from Bangladesh.

Country context

Bangladesh has a high contraceptive prevalence rate (CPR) among married women aged 15-49 of 62 percent and a relatively low level of unmet need (percentage of non-contracepting women at risk of pregnancy with an apparent need for family planning services based upon their expressed desire to limit or space future births) of 12.0 percent (NIPORT and ICF, 2020). The three most common methods used in the country are pills (25%), injectables (11%), and condoms (7%) (NIPORT and ICF, 2020). The health system in Bangladesh serves a total population of 164,689,380 and is characterized by a high number of facilities located in rural areas (92.9%) (NIPORT and ICF, 2019; the World Bank Group, 2021). The vast majority of health facilities are managed by the public sector (93%), compared to nongovernmental organizations (NGO) (4.2%) or the private sector (2.8%) (NIPORT and ICF, 2019). Public healthcare services are organized along three main levels:

- Primary-level healthcare (provided in rural health centers, union subcenters, union family welfare centers, upazila health complexes, and community-level healthcare (provided by the domiciliary health providers and community clinics))
- Secondary-level healthcare (provided in district hospitals, general hospitals, chest disease clinics, tuberculosis clinics, and leprosy hospitals)

- Tertiary-level healthcare (provided in postgraduate medical institutes, specialized healthcare centers, medical college hospitals, and infectious disease hospitals).

Family welfare assistants that provide family planning services directly to households are stationed with community clinics at the primary level. The private sector also has health facilities ranging from individual doctors' offices to high-end tertiary international-standard hospitals (GoB Health Bulletin, 2017; Joarder et al. 2019).

Table 1 presents the availability of family planning services in Bangladesh. The percentage of all facilities offering any modern family planning method is 89 percent; the provision of methods on site is slightly lower, at 86 percent. Long-acting or permanent methods are less frequently available: 50 percent of facilities offer any long-acting or permanent method while 26% percent provide these methods on site.

Table 1: Availability of family planning services [offered & provided] in SDPs, BHFS 2017-18 [weighted for survey design]

SDPs	Any modern methods[1]		Any modern temporary methods[2]		Any permanent methods[3]		Any long-acting or permanent methods[4]		Number of institutions
	Offered	Provided	Offered	Provided	Offered	Provided	Offered	Provided	
	%	%	%	%	%	%	%	%	n
Managing Authority									
Public	90.4	88.4	90.4	88.4	30.0	3.7	48.7	23.8	1,418
NGO	86.4	83.1	86.4	83.1	42.1	10.5	79.6	69.3	63
Private	53.3	25.2	49.3	21.1	45.0	17.9	47.6	19.3	43
Location									
Urban	78.7	66.9	77.0	65.4	53.9	30.1	74.6	61.5	108
Rural	90.0	87.9	90.0	87.8	29.1	2.5	48.1	22.8	1,416
Facility Level									
Primary level	90.2	88.2	90.2	88.2	30.1	3.5	49.7	25.3	1,469
Secondary level	61.7	38.8	58.3	35.3	51.2	27.5	57.0	33.3	55
Division									
Barisal	93.8	91.1	93.7	91.1	22.6	4.6	41.6	23.5	113
Chittagong	90.7	88.4	90.5	88.1	39.5	5.6	54.9	25.9	288
Dhaka	87.5	81.9	87.1	81.9	26.5	5.9	51.2	26.6	304
Khulna	93.2	90.7	93.2	90.7	33.0	2.7	55.5	25.3	187
Mymensingh	90.0	86.4	90.0	86.2	55.7	4.7	67.3	26.4	220
Rajshahi	91.5	89.3	91.5	88.9	24.4	4.6	49.4	31.6	193
Rangpur	76.4	75.5	76.4	75.5	18.0	2.4	31.2	20.7	96
Sylhet	96.1	95.9	96.1	95.9	32.5	2.3	47.6	18.9	123
Total	89.2	86.4	89.1	86.3	30.8	4.4	50.0	25.6	1,524

[1] Health facility provides, prescribes, or counsels on any of the following: contraceptive pills (combined or progestin-only), injectables (progestin-only), male condom, intrauterine contraceptive devices (IUDs), one-rod implants, two-rod implants, male sterilization (vasectomy), female sterilization (tubal ligation), and emergency contraceptives.

[2] Health facility provides, prescribes, or counsels on any of the following: contraceptive pills (combined or progestin-only), injectables (progestin-only), male condom, intrauterine contraceptive devices (IUDs), one-rod implants, two-rod implants, and emergency contraceptives.

[3] Health facility reports providing clients with one of the following lifelong family planning methods: male sterilization, female sterilization in the health institution.

[4] Health facility reports providing clients with one of the following long-acting and permanent family planning methods: male sterilization, female sterilization, IUD, and implants in the health institution.

Methods

A landscape assessment was first conducted to identify common indicators of method availability. The assessment included a review of published and gray literature, relevant monitoring and evaluation guidance documents, online indicator databases, and measurement frameworks. The indicator title, definition, minimum number and mix of methods, data source for measurement, and reference source(s) were collected. Indicator definitions from resource guides and documents were prioritized for further analysis; only one example of a "researcher-defined" indicator is included, meaning that it was developed for a specific study or purpose and is not based on published guidance.

To assess the differences in measurement based on indicator definition, recent SPA data were obtained from the Bangladesh Health Facility Survey (BHFS) 2017-18, during July–October 2017 data collection period. The SPA includes a facility inventory questionnaire along with health provider interviews, provider-client observations, and exit interviews with clients to collect nationally representative data on key health service indicators, including those related to the availability of family planning services. SPA data are publicly available. Written consent for interviews and oral permission to observe consults were obtained at the time of survey administration and the data were fully anonymized before the analysis.

The SPA data were used to calculate indicators identified in the landscape assessment. Indicator definitions rely on two terms to define method availability: "offering" and "providing" contraceptive methods. The SPA defines these terms as: "a facility is considered to *offer* family planning services if the facility reports that it provides a specified family planning method, prescribes the method for clients to obtain elsewhere, or counsels clients on the method. Facilities in this category do not necessarily provide family planning methods to clients. A facility is said to *provide* family planning services if the facility reports that it stocks a specific method and makes it available to clients when they visit the facility. Facilities in this category provide family planning methods to clients" (NIPORT and ICF, 2019, p. 73). Both terms are used in method availability indicators.

Modern methods included in the assessment are oral contraceptive pills ("pills," combined oral contraceptive pills and/or progestin-only contraceptive pills), emergency contraceptive pills (ECP), injectables, male condoms, implants (one-rod or two-rod), intrauterine contraceptive devices (IUD), male sterilization (vasectomy), and female sterilization (tubectomy). These methods are categorized in different ways, according to the method availability indicator guidance. For this analysis, all hospitals are considered secondary-level service delivery points (SDPs) and facilities other than hospitals are considered primary-level SDPs.

A descriptive analysis of indicator performance includes the overall estimate of SDPs (aka health facilities) that meet the indicator cutoff points, as well as differences by managing authority (public, private, or NGO), health facility level (primary or secondary), and urban/rural location. The analysis used statistical software package Stata version 16.0 (StataCorp 2017). Sampling weights for SPA were applied using Stata's survey estimation procedures ("svy" command) to adjust for sample design.

To assess the method availability indicators with routine data, DHIS2 data from the same time period (July – October 2017) as the SPA were requested and obtained from Bangladesh. Similar analytical methods were planned for the assessment of method availability using routine data as for the SPA data.

Results

We identified eight variations of the indicator for method availability that are based on the number and type of methods available at SDPs. These came from the FP/RH Indicators Database developed by the USAID-funded

MEASURE Evaluation project (currently maintained by Data for Impact); the Reproductive Health Supplies Coalition; Family Planning 2020 (FP2020); WHO (2014); the Guttmacher Institute (2015); the Full Access / Full Choice project; the DHS Program (2020); and published research. The list was not exhaustive; due to the lack of standardization for the measurement, additional variations have been developed and used for monitoring, evaluation, and research (i.e., Barden-O'Fallon, 2017; Choi et al., 2021).

The eight identified indicators are shown in Table 2. Indicators differed by whether they assessed a minimum number of methods available (indicators #1, #5, #6) or whether they also included a minimum mix of methods (indicators #2, #3, #4, #7, #8). The minimum number of methods varied from three to six and were sometimes differentiated by the level of the health facility (indicator #6). Minimum requirements for method mix varied from two types (indicator #2) to six types (indicator #8). Common method type categories included "short-term" (also referred to as "temporary" and "short-acting") and "long-acting" (also referred to as "long-acting reversible contraception" (LARC) and "long-term") or "permanent." Other method category types included barrier and emergency methods, and a differentiation between "hormonal short-acting" and "hormonal medium-acting" methods. The specific methods included in each of these categories are shown in Table 2.

The eight indicators also differed by whether they measured "offering" or "provision" of the methods. Indicators #1–6 could be calculated for both "offering" and "providing" with SPA data, though "offering" was more commonly used in the indicator language (note that indicators #5 and #6 were not specific, using the term "have available"). Indicators #5-6 were calculated using "offering" for this analysis. Indicators #7-8 were specific for "provision" of methods and were calculated accordingly.

Table 2. Eight versions of method availability indicator

#	Indicator Definition	Reference Source(s)
1	Percentage of family planning facilities offering at least three modern family planning methods	Researcher defined; for example, see Wang & Mallick, 2019
2	Percentage of SDPs offering at least two modern temporary methods and at least one LARC on site. *Temporary methods:* pills, condom, ECP, injectables, spermicides *LARC:* long-acting reversible contraceptive methods, e.g., implants and IUDs.	FP/RH Indicators Database (Data for Impact)
3	Percentage of facilities offering at least one short-acting, one long-acting or permanent, and one barrier or non-hormonal method. *Short-acting methods*: pills, ECP, injectables *Long-acting methods*: implants, IUD *Permanent methods:* male or female sterilization *Barrier or non-hormonal methods*: condom, cycle beads	Full Access/Full Choice, 2020; (Mallick et al., 2020, use a version of this indicator with "providing")
4	Proportion of sites that offer at least one of each type of contraceptive method (short-term, long-term, permanent, and emergency) *Method types were not included in the guidance. For analysis these were considered as:* *Short-term methods:* condom, pills, injectables *Long-term methods:* IUDs, implants *Permanent methods:* male or female sterilization *Emergency contraceptive method:* ECP	WHO, 2014
5	Proportion of family planning service sites with at least five modern methods available	Guttmacher, 2015
6	Percentage of primary SDPs with at least three modern methods of contraception available on day of assessment; percentage of secondary/tertiary SDPs	Reproductive Health Supplies Coalition, 2015; FP2020

	with at least five modern methods of contraception available on day of assessment *Primary-level health SDPs:* facilities other than hospitals are considered primary-level SDPs. *Secondary-level SDPs:* all hospitals are considered secondary-level SDPs	
7	Percentage of SDPs providing at least one method from each of four of six method categories *Barrier method:* condom *Hormonal short-acting method:* pills *Hormonal medium-acting method:* injectables *Long-acting reversible method:* implants, IUDs *Permanent method:* male or female sterilization *Emergency contraceptive method:* ECP	Reproductive Health Supplies Coalition, 2015
8	Percentage of SDPs providing at least one method from each of six method categories Method categories: (see above)	Reproductive Health Supplies Coalition, 2015

Health facility data

The eight versions of the method availability indicator were calculated using SPA data for Bangladesh Health Facility Survey 2017-18 (BHFS). The percentage of SDPs meeting indicator definitions for offering methods (indicators 1-6 shown -in Tables 3 and 4) ranged from 25 percent to 91 percent, or a spread of 66 percent depending on the indicator used. However, over 50 percent of all SDPs offering family planning were able to meet indicator definitions for all indicators except #4. Indicators #2 and #3 require a different mix of methods but produced estimates that were virtually the same (52.1% and 51.8%, respectively).

There was variation across the indicators when looking at the managing authority of the SDP: some showed the highest method availability in the public sector (indicators #1 and #6), some by NGOs (indicators #2, #3, and #5), and one by both the private and NGO sector (indicator #4). Indicators generally showed higher method availability in urban areas as compared to rural areas, except for indicator #1, which produced higher estimates of method availability for rural SDPs than for urban (91% vs 88%). Secondary-level SDPs were able to meet indicator criteria more often than primary-level SDPs, except in the case of indicator #6, which required different criteria for the two levels of SDP.

Table 3: Percentage of SDPs offering family planning services in Bangladesh, by indicator [Indicators 1-5]; BHFS 2017-18

SDPs	At least 3 methods[1]	At least 3 methods (mix)[2]	At least 3 methods (mix)[3]	At least 4 methods (mix)[4]	At least 5 methods[5]	Number of facilities
	Indicator 1	Indicator 2	Indicator 3	Indicator 4	Indicator 5	
Managing authority						
Public	91.4	50.6	50.4	23.5	63.4	1,339
NGO	89.8	84.4	83.1	41.9	85.8	59
Private	72.9	54.9	54.4	42.0	67.1	29
Location						
Urban	88.1	82.0	82.2	53.4	85.9	92
Rural	91.2	50.0	49.8	22.6	62.9	1,335
Facility level						
Primary level	91.3	51.7	51.4	23.9	64.1	1,387
Secondary level	78.8	65.4	66.8	49.8	73.5	40

Division						
Barisal	92.8	42.1	41.9	22.5	59.9	111
Chittagong	95.2	54.4	57.7	23.6	68.6	273
Dhaka	86.4	55.9	53.9	23.6	57.7	276
Khulna	94.3	57.7	56.7	24.6	69.4	179
Mymensingh	91.5	69.8	66.3	45.1	79.8	118
Rajshahi	96.9	51.2	50.9	21.9	64.0	203
Rangpur	81.5	35.0	35.0	18.5	62.9	172
Sylhet	87.0	46.6	46.3	24.6	51.8	95
Total	90.9	52.1	51.8	24.6	64.4	1,427

[1] At least any three modern methods.
[2] At least three modern methods with at least two temporary (i.e, combined pill, progesterone pill, emergency contraceptive pill, injectables, male condom) and at least one long-acting or permanent method (LARC-PM) (i.e., IUD and implant).
[3] At least three modern methods with the combination of any one LARC-PM (IUD, one-rod implant, two-rod implant, vasectomy, and tubectomy), one barrier (condom), and one short-acting without barrier method (combined pill, progesterone pill, emergency contraceptive pill, injectables).
[4] At least four modern methods with the combination of at least one short-term (i.e., combined pill, progesterone pill, injectables, male condom), one long-term (i.e., IUD, one-rod implant, two-rod implant), one permanent method (i.e., vasectomy, tubectomy) and one emergency contraceptive method.
[5] At least any five modern methods (i.e., combined pill, progesterone pill, emergency contraceptive pill, injectables, male condom, IUD, one-rod implant, two-rod implant, vasectomy, and tubectomy).

Table 4: Percentage of SDPs offering family planning services in Bangladesh, by indicator [Indicator 6]; BHFS 2017-18

SDPs	At least 3 methods at primary level[1] Indicator 6a	Number of primary-level facilities	At least 5 methods at secondary level[2] Indicator 6b	Number of secondary-level facilities
Managing authority				
Public	91.4	1,328	89.2	11
NGO	89.7	59	80.0	<1
Private	0.0	0	67.1	28
Location				
Urban	94.7	55	73.8	37
Rural	91.2	1,332	69.9	3
Division				
Barisal	93.0	110	73.4	2
Chittagong	95.7	264	77.3	9
Dhaka	86.7	262	73.0	13
Khulna	94.6	176	75.7	3
Mymensingh	91.6	117	65.1	1
Rajshahi	97.3	198	75.9	4
Rangpur	81.6	169	77.5	4
Sylhet	87.9	91	59.1	4
Total	91.3	1,387	73.1	40

[1] At least any three modern methods (i.e., combined pill, progesterone pill, emergency contraceptive pill, injectables, male condom, IUD, implant, vasectomy, and tubectomy) offered at facilities other than hospitals.
[2] At least any five modern methods (i.e., combined pill, progesterone pill, emergency contraceptive pill, injectables, male condom, IUD, implant, vasectomy, and tubectomy) offered at hospitals.

In contrast, when assessing method availability on site (*providing*), the percentage of SDPs meeting indicator definitions for providing methods (indicators 1–8 shown in Tables 5–7) ranged from 4 percent to 85 percent, or a spread of over 80 percent difference depending on the indicator used. Over 50 percent of SDPs met the indicator definition for provision of methods for three of the eight indicators (#1, #6 (primary-level SDPs), and #7). Similar to the calculation of methods offered, indicators #2 and #3 require a different mix of methods but produced estimates that were virtually the same (26.8% and 26.9%, respectively).

There was little variation across the indicators when looking at the managing authority of the SDP: almost all indicators show the highest method availability in the NGO sector, the only exception being secondary-level SDPs for indicator #6. Indicators generally showed higher method availability in urban areas as compared to rural areas, with the exception of indicators #1, #6 (secondary-level SDPs), and #7. Indicators were evenly split on whether primary- or secondary-level SDPs were more likely to meet the indicator definitions.

Table 5: Percentage of SDPs providing family planning services in Bangladesh, by indicator [Indicators 1-5]; BHFS 2017-18

SDPs	At least 3 methods[1] Indicator 1	At least 3 methods (mix)[2] Indicator 2	At least 3 methods (mix)[3] Indicator 3	At least 4 methods (mix)[4] Indicator 4	At least 5 methods[5] Indicator 5	Number of facilities
Managing authority						
Public	85.1	25.1	25.1	3.7	44.1	1,339
NGO	85.6	73.4	73.4	10.4	76.7	59
Private	29.1	9.7	16.8	6.9	17.8	29
Location						
Urban	73.8	65.6	67.9	27.2	69.3	92
Rural	84.7	24.2	24.2	2.5	43.2	1,335
Facility Level						
Primary level	85.1	26.7	26.7	3.6	45.1	1,387
Secondary level	46.5	31.3	36.4	21.2	37.1	40
Division						
Barisal	87.6	23.7	23.6	4.4	40.0	111
Chittagong	88.5	26.7	27.1	4.8	43.3	273
Dhaka	74.1	28.5	28.9	5.7	38.9	276
Khulna	91.3	26.4	26.3	2.3	47.0	179
Mymensingh	85.4	27.2	27.2	4.3	53.4	118
Rajshahi	87.4	33.4	33.5	4.2	50.2	203
Rangpur	81.1	23.2	23.2	2.7	52.7	172
Sylhet	78.7	19.2	19.1	2.0	33.0	95
Total	84.0	26.8	26.9	4.1	44.9	1,427

[1] At least any three modern methods.
[2] At least three modern methods with at least two temporary (i.e., combined pill, progesterone pill, emergency contraceptive pill, injectables, male condom) and at least one long-acting or permanent method (LARC-PM) (i.e., IUD and implant).
[3] At least three modern methods with the combination of any one LARC-PM (IUD, one-rod implant, two-rod implant, vasectomy and tubectomy), one barrier (condom), and one short-acting without barrier method (combined pill, progesterone pill, emergency contraceptive pill, injectables).
[4] At least four modern methods with the combination of at least one short-term (i.e., combined pill, progesterone pill, injectables, male condom), one long-term (i.e., IUD, one-rod implant, two-rod implant), one permanent method (i.e., vasectomy, tubectomy) and one emergency contraceptive method.
[5] At least any five modern methods (i.e., combined pill, progesterone pill, emergency contraceptive pill, injectables, male condom, IUD, one-rod implant, two-rod implant, vasectomy, and tubectomy).

Table 6: Percentage of SDPs providing family planning services in Bangladesh, by indicator [Indicator 6]; BHFS 2017-18

SDPs	At least 3 methods[1] at primary level Indicator 6a	Number of primary-level facilities	At least 5 methods[2] at secondary level Indicator 6b	Number of secondary-level facilities
Managing authority				
Public	85.1	1,328	84.5	11
NGO	85.8	59	60.0	<1
Private	0.0	0	17.8	28
Location				
Urban	93.9	55	35.8	37
Rural	84.8	1,332	55.6	3

Division				
Barisal	88.0	110	53.6	2
Chittagong	89.8	264	41.9	9
Dhaka	76.3	262	30.2	13
Khulna	91.9	176	56.1	3
Mymensingh	85.9	117	31.7	1
Rajshahi	88.2	198	46.2	4
Rangpur	81.6	169	34.2	4
Sylhet	79.4	91	18.2	4
Total	85.1	1,387	37.1	40

[1] At least any three modern methods (i.e., combined pill, progesterone pill, emergency contraceptive pill, injectables, male condom, IUD, implant, vasectomy, and tubectomy) provided at facilities other than hospitals.
[2] At least any five modern methods (i.e., combined pill, progesterone pill, emergency contraceptive pill, injectables, male condom, IUD, implant, vasectomy, and tubectomy) provided at hospitals.

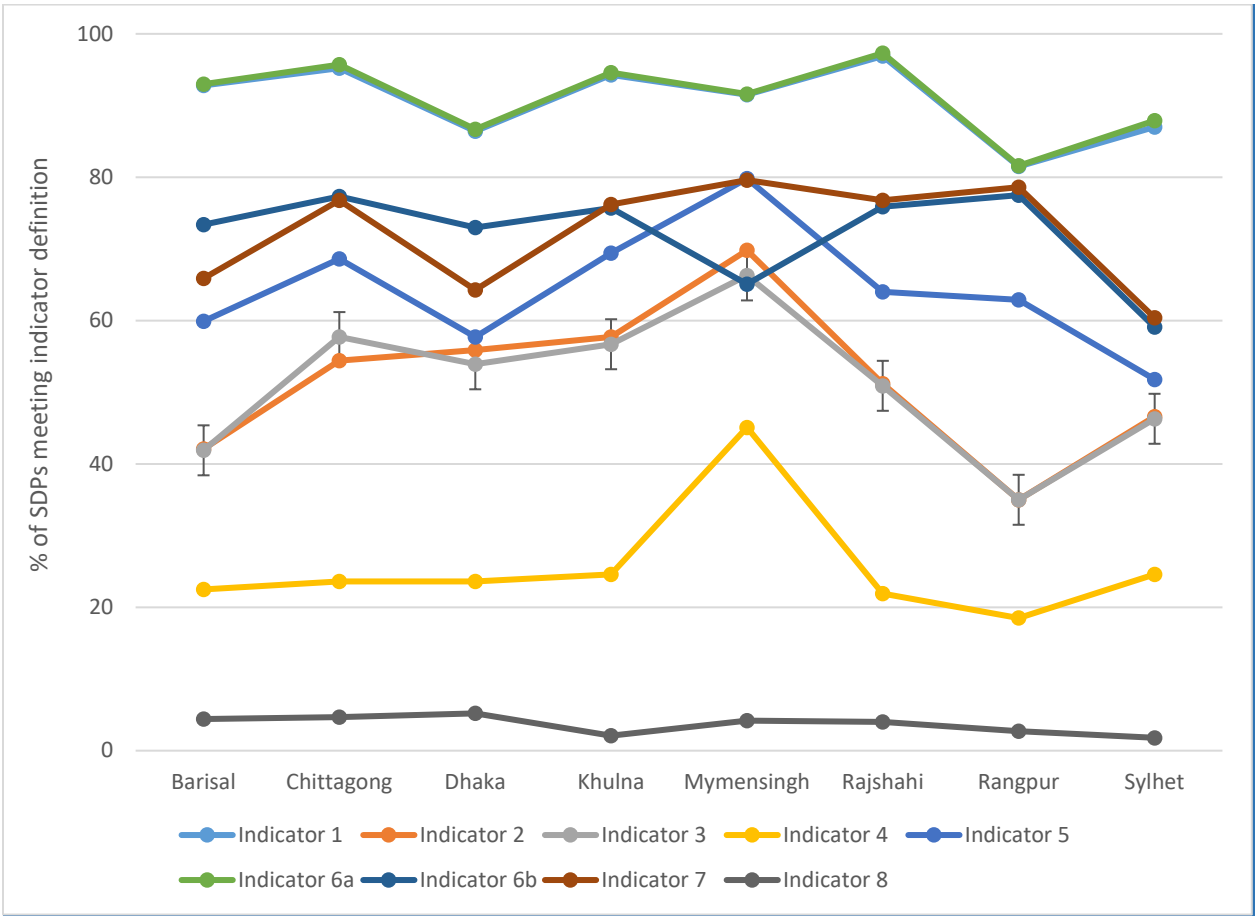
Table 7: Percentage of SDPs providing family planning services in Bangladesh, by indicator [Indicators 7-8]; BHFS 2017-18

SDPs	At least 1 method from 4 of 6 categories[1] Indicator 7	At least 1 method from all 6 categories Indicator 8	Number of facilities
Managing authority			
Public	73.5	3.6	1,339
NGO	82.7	9.6	59
Private	18.3	6.0	29
Location			
Urban	69.8	25.7	92
Rural	73.0	2.4	1,335
Facility Level			
Primary level	73.8	3.4	1,387
Secondary level	38.5	19.9	40
Division			
Barisal	65.9	4.4	111
Chittagong	76.8	4.7	273
Dhaka	64.3	5.2	276
Khulna	76.2	2.1	179
Mymensingh	79.6	4.2	118
Rajshahi	76.8	4.0	203
Rangpur	78.6	2.7	172
Sylhet	60.4	1.8	95
Total	72.8	3.9	1,427

[1] At least any four or six of the following method categories: barrier, hormonal short-acting, hormonal medium-acting, long-acting reversible, permanent, emergency contraceptive.

Indicator performance is compared across the eight regions of Bangladesh (see Figure 1). The graph shows fairly consistent performance across the regions with the exception of Mymensingh, where indicator #6b (secondary-level SDPs) underperforms as compared to indicators #2, #3, #5, and #7 and is the only indicator for which Mymensingh is below the average. Also in Mymensingh, indicator #4 is much higher than in other regions in Bangladesh. The figure underscores the variability in estimated method availability depending on which indicator definition is used, even when looking subnationally.

Figure 1. Regional variation in method availability at SDPs, by all eight indicators, BHFS 2017-18*



*Indicator 6 is shown as 6a for primary-level SDPs and 6b for secondary-level SDPs

Routine data and method availability

We obtained DHIS2 data from the same period that data were collected for the BDHS. These data included information from 1,835 health facilities during July–October 2017. The DHIS2 was not yet rolled out across the entire country at this time, so the data represented only the included catchment areas. However, there were a number of limitations that affected the ability to use DHIS2 data to assess these indicators of method availability. The main limitation was that the data did not contain facility-level information. The routine data were national-level and could be disaggregated by administrative regions (e.g., division, district, etc.) but not by facility. Another important limitation was that the routine data included information from public health facilities only. In Bangladesh, 54 percent of current users obtained their method through a private provider or NGO source (NIPORT & ICF, 2020), which are not included in the routine data. Another source of routine data, the Electronic Logistics Management Information data (eLMIS), for this period were also reviewed. As with the DHIS2 data, we were not able to determine method availability at SDPs.

Discussion

A review of indicator guidance and literature on contraceptive method choice and access for the family planning service environment resulted in multiple variations of an indicator to measure method availability. Sources included the WHO, the Reproductive Health Supplies Coalition, Guttmacher Institute, U.S. Agency

for International Development and Bill and Melinda Gates Foundation-funded project materials, and the Demographic and Health Survey, although we note that additional versions are often developed and used for assessments of method choice/quality of care research efforts. Furthermore, our results showed the wide variability in method availability estimates depending on the indicator used, underscoring the importance of harmonizing measurement efforts.

Indicator language varied in whether methods were "offered" or "provided"; sometimes the terms were used interchangeably in definitions making it difficult to determine which should be used for indicator calculation. In Bangladesh, health facilities delivering family planning services were more likely to "offer" methods than "provide" them. In part this is due to national policies that limit the ability of primary-level facilities to provide long-term methods. For example, a requirement that only doctors or trained paramedics can insert implants means that these methods are only available on site at larger clinics and facilities (GoB CCSDP-OP 2017).

Ensuring method choice means a selection of methods are available for users at different stages of their lives with recognition that users have different preferences and levels of tolerance for side effects, and that these can both change over time. It is therefore essential that methods of different types are available. While a mix of methods would necessarily be attained the more methods that were offered, setting a guide on type can help standardize the measure. We therefore argue for a version of the method availability indicator that includes a required minimum method mix in addition to an overall minimum number of methods available. In this analysis, that would potentially be indicators #2, 3, 4, 7, and 8. Indicator #4 (from the WHO) and indicator #8 (from the Reproductive Health Supplies Coalition) set the bar for a "full range of available methods" very high; the percentage of SDPs meeting the indicator #4 definition in this analysis was 24.6 percent when method referrals were included and 4.1 percent if methods needed to be available on site. The percentage of SDPs meeting indicator #8 was 3.9 percent. Due to policies that limit the availability of long-term methods in primary-level facilities, these indicators would not be expected to greatly improve over time without changes to policies, infrastructure, staffing, and/or training.

Indicators #2 and #3 are similar in the requirement for a minimum of at least three methods, one of which must be long-acting or permanent; the difference is that indicator #3 specifies that at least one of the short-term methods must be barrier or non-hormonal. If the indicator includes method referrals, the percent of SDPs able to meet the definition for both indicators is about 52 percent.

Indicator #7 was calculated for the provision of methods on site, meaning that referred methods were not included. However, even though a minimum of four methods were required by the definition, SDPs could meet this indicator without providing any long-term methods on site (by providing condoms, pills, injectables, and ECP), thus making it possible for primary-level and rural SDPs to meet the definition as well as larger, urban SDPs more likely to have the staffing and infrastructure to provide long-term methods.

Health facility data from a validated data collection tool were used for this analysis. However, routine data can also be used to calculate method availability when estimates can be made at the facility level. Additional considerations for using routine data include whether the data are available for all regions of the country; whether the data include non-public sector health facilities (and how significant the impact of not including the private and nongovernmental organization sectors would be); and the overall quality of the data (including the degree to which there is missing or inaccurate information). Many middle- and lower-income countries struggle with data quality and the integration of non-public sector data into their health management information systems (Adamou et al., 2020). Unfortunately, this has consequences for using the data for program monitoring and decision making. The most recent FP2020 progress report states that assessment of method availability was constrained by poor data availability and inconsistent monitoring and reporting (FP2020, 2021). The authors recommended regular implementation of health facility surveys and health information systems that can produce data at the facility level to help alleviate some of these constraints (FP2020, 2021).

Recommendations

As a result of this analysis, we recommend indicator #7 be used to assess and compare method availability within and across countries. We further recommend that the indicator be calculated for both "providing" as well as "offering" methods in contexts in which the referrals of methods are important to capture. The indicator requires a minimum of four method types (similar to WHO guidance for indicator #4) but allows for some flexibility among the types; calculating it for "offering" will add additional flexibility for lower-level SDPs to achieve improved method availability by providing information, counseling, and referrals for methods that may require higher-level infrastructure or provider cadres. Indicator language should always be clear whether method referrals are included in the calculation, thus whether "offering" or "provision" of methods is used. Evaluators can further tabulate the indicator by SDP characteristics such as urban/rural location, facility level, facility type, or managing authority, to identify national and subnational policy and program implications.

In Bangladesh, 89 percent of service delivery points offer at least one modern method of family planning. Of these, 73 percent provide at least four of six method types on site. The availability of methods is highest for service providers in the NGO sector (83%) as compared to the public (74%) or private (18%) sectors. The provision of at least four method types is higher for primary-level providers (74%) than for secondary-level providers (39%). Regions with higher-than-average method availability include Chittagong, Khulna, Mymensingh, Rajshahi, and Rangpur.

Lastly, although health information systems like DHIS2 can theoretically provide data to calculate method availability, at least in the public sector, there remain many barriers to doing so. Continued investment to expand coverage and improve data quality will help remove some of the barriers. In Bangladesh, two information systems are maintained separately by two directorates to get information on family planning. We propose an integrated information system with linkage to the eLMIS to get holistic information on contraceptive service provision. We further recommend that the system be structured to provide facility-level data for analysis. This would not only facilitate the calculation of method availability, but other facility-level indicators related to method choice and service quality.

Limitations

Method availability can be influenced by stockouts, provider biases, cost concerns, and other factors, which are not assessed by this indicator, thus multiple measures are needed for a complete evaluation of the concept. Here we focused on what could be considered a foundational measure of method availability, upon which other measures can be added. While eight versions of the indicator are compared in this analysis, we acknowledge that the list of indicator definitions is not exhaustive. Furthermore, we acknowledge that our interpretation of indicator language and definitions may not be what was intended in the source documents.

The analysis was conducted for SDPs that offer any method of family planning. In Bangladesh, this is almost 90 percent of all SDPs. It is not known if there are facilities not offering any family planning methods that should be doing so, and thus should be included in the denominator. Method availability calculations may therefore be

inflated. We recommend that the percentage of facilities offering any family planning methods also be considered when interpreting method availability.

Results from this analysis would be strengthened with additional research on the performance of indicators in different country contexts.

Conclusions

The provision of a "full range of methods" is a requirement for ensuring method choice that can be combined with other actions, such as improving client-centered counseling and reducing provider biases. Many sources of indicator guidance exist for determining method availability, though there is no consensus on where to set the bar for measurement; a more standardized approach will assist with making programmatic decisions related to policies, regulations, training, and infrastructure improvement, as well as assist with cross-country and regional comparisons. Indicator language should be clear and consistent. We argue that indicator definitions for method availability should include a minimum mix of method types as well as a minimum number of methods, and propose using an indicator from the Reproductive Health Supplies Coalition, "percentage of SDPs providing at least one method from each of four of six method categories: barrier method (condoms); a hormonal short-acting method (pills); hormonal medium-acting method (injectables); long-acting reversible method (implants, IUDs); permanent method (male or female sterilization); or ECP.

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Annex: Indicator Definitions

Indicator 1	**% SDPs offering at least 3 modern family planning methods (no mix required)**
Numerator	Number of health facilities offering any 3 or more modern family planning methods at the time of survey
Denominator	Total number of health facilities offering family planning methods
Terms	*SDPs:* service delivery points, also called health facilities. *At least 3 modern family planning methods:* any 3 or more modern family planning methods *Offering family planning methods:* A facility is considered to *offer* family planning services if the facility reports that it provides a specific family planning method, prescribes the method for clients to obtain elsewhere, or counsels clients on the method. Facilities in this category do not necessarily provide family planning methods to clients. Also calculated for *providing family planning methods*: A facility is said to *provide* family planning services if the facility reports that it stocks a specific method and makes it available to clients when they visit the facility. Facilities in this category provide family planning methods to clients.
Source	Published literature (Wang & Mallick, 2018)

Indicator 2	**% SDPs offering at least 3 modern family planning methods: at least 2 temporary methods and at least 1 LARC-PM**
Numerator	Number of health facilities offering at least 3 modern family planning methods with the combination of at least any 2 temporary methods and at least any 1 LARC at the time of survey
Denominator	Total number of health facilities offering family planning methods
Terms	*SDPs:* service delivery points, also called health facilities. *Temporary methods*: pills, condom, ECP, injectables, implants, IUDs. *LARC*: long-acting reversible contraceptive methods, e.g., implants, and IUDs. *Offering family planning methods:* A facility is considered to *offer* family planning services if the facility reports that it provides a specific family planning method, prescribes the method for clients to obtain elsewhere, or counsels clients on the method. Facilities in this category do not necessarily provide family planning methods to clients. Also calculated for *providing family planning methods*: A facility is said to *provide* family planning services if the facility reports that it stocks a specific method and makes it available to clients when they visit the facility. Facilities in this category provide family planning methods to clients.
Source	FP/RH Indicators Database (MEASURE Evaluation and Data for Impact)

Indicator 3	**% SDPs offering at least 3 modern family planning methods: at least 1 long-acting or permanent, 1 barrier, and 1 short-acting**
Numerator	Number of health facilities offering at least 3 modern family planning methods with the combination of 1 long-acting or permanent, 1 barrier, and 1 short-acting method at the time of survey
Denominator	Total number of health facilities offering family planning methods
Terms	*SDPs:* service delivery points, also called health facilities. *Long-acting methods:* implants, IUDs, male sterilization, female sterilization. *Barrier method:* condom. *Short-acting methods:* pills, ECP, injectables. *Offering family planning methods:* A facility is considered to *offer* family planning services if the facility reports that it provides a specific family planning method, prescribes the method for clients to obtain elsewhere, or counsels clients on the method. Facilities in this category do not necessarily provide family planning methods to clients. Also calculated for *providing family planning methods*: A facility is said to *provide* family planning services if the facility reports that it stocks a specific method and makes it available to clients when they visit the facility. Facilities in this category provide family planning methods to clients.
Source	DHS analytical report #74 (August 2020); Full Access/Full Choice (project slide deck)

Indicator 4	**Contraceptive method mix**
Numerator	Number of facilities offering at least 1 short-term, 1 long-term, 1 permanent, and 1 emergency method of contraception in a defined catchment area
Denominator	Total number of health facilities in the defined catchment area
Terms	*Short-term methods:* condom, oral contraceptive pills (e.g., combined oral contraceptive pills or progestin-only contraceptive pills), injectables *Long-term methods:* IUDs, implants (e.g., one-rod implant, two-rod implant) *Permanent methods:* male sterilization (vasectomy), female sterilization (tubectomy) *Emergency contraceptive method:* ECP. *Offering family planning methods:* A facility is considered to *offer* family planning services if the facility reports that it provides a specific family planning method, prescribes the method for clients to obtain elsewhere, or counsels clients on the method. Facilities in this category do not necessarily provide family planning methods to clients. Also calculated for *providing family planning methods*: A facility is said to *provide* family planning services if the facility reports that it stocks a specific method and makes it available to clients when they visit the facility. Facilities in this category provide family planning methods to clients.
Source	WHO, 2014

Indicator 5	**% SDPs with at least 5 modern methods available**
Numerator	Number of health facilities offering/providing any 5 or more family planning methods at the time of survey
Denominator	Total number of health facilities offering/providing family planning method
Terms	***At least 5 modern methods*****:** any 5 or more modern family planning methods. ***Offering family planning methods****:* A facility is considered to *offer* family planning services if the facility reports that it provides a specific family planning method, prescribes the method for clients to obtain elsewhere, or counsels clients on the method. Facilities in this category do not necessarily provide family planning methods to clients. **Also calculated for *providing family planning methods*:** A facility is said to *provide* family planning services if the facility reports that it stocks a specific method and makes it available to clients when they visit the facility. Facilities in this category provide family planning methods to clients.
Source	Guttmacher, 2015

Indicator 6	**% primary-level SDPs offering at least 3 modern family planning methods and % secondary level SDPs offering at least 5 modern family planning methods**
Numerator	Number of primary-level SDPs offering at least 3 modern family planning methods at the time of survey Number of secondary-level SDPs offering at least 5 family planning methods at the time of survey
Denominator	Total number of primary-level health facilities Total number of secondary-level health facilities
Terms	***SDPs:*** service delivery points, also called health facilities. ***Primary-level health SDPs****:* facilities other than hospitals are considered primary-level SDPs ***Secondary-level SDPs:*** all hospitals are considered secondary-level SDPs ***At least 3 modern family planning methods:*** any 3 or more modern methods ***At least 5 modern family planning methods:*** any 5 or more modern methods ***Offering family planning methods:*** A facility is considered to *offer* family planning services if the facility reports that it provides a specific family planning method, prescribes the method for clients to obtain elsewhere, or counsels clients on the method. Facilities in this category do not necessarily provide family planning methods to clients. **Also calculated for *providing family planning methods:*** A facility is said to *provide* family planning services if the facility reports that it stocks a specific method and makes it available to clients when they visit the facility. Facilities in this category provide family planning methods to clients.
Source	Reproductive Health Supplies Coalition, 2015; Indicator 11 for FP2020

Indicator 7	% SDPs providing at least one method from each of 4 of 6 method categories
Numerator	Number of health facilities providing at least one method from each of 4 of the 6 categories at the time of survey
Denominator	Total number of health facilities providing family planning methods
Terms	***SDPs:*** service delivery points, also called health facilities. ***6 categories of family planning methods:*** barrier; hormonal short-acting method; hormonal medium-acting method; long-acting reversible method; permanent method; emergency contraceptive pill. ***Barrier method:*** scondom ***Hormonal short-acting method****:* oral contraceptive pills ***Hormonal medium-acting method****:* injectables ***Long-acting reversible methods (LARC):*** implants, IUDs ***Permanent methods****:* male sterilization (vasectomy), female sterilization (tubectomy) ***Emergency contraceptive method****:* ECP ***Provide*****:** A facility is said to ***provide family planning services*** if the facility reports that it stocks a specific method and makes it available to clients when they visit the facility. Facilities in this category provide family planning methods to clients.
Source	Reproductive Health Supplies Coalition, 2015

Indicator 8	% SDPs providing at least one method from each of 6 method categories
Numerator	Number of health facilities providing at least 6 methods with the combination of at least one method from each of 6 categories at the time of survey
Denominator	Number of health facilities offering/providing family planning methods
Terms	***SDPs:*** service delivery points, also called health facilities. ***6 categories of family planning methods:*** barrier; hormonal short-acting method; hormonal medium-acting method; long-acting reversible method; permanent method; emergency contraceptive pill. ***Barrier method****:* male condom ***Hormonal short-acting method:*** oral contraceptive pills (e.g., combined oral contraceptive pills, or progestin-only contraceptive pills) ***Hormonal medium-acting method****:* injectables ***Long-acting reversible methods (LARC):*** implants, IUDs ***Permanent methods****:* male sterilization (vasectomy), female sterilization (tubectomy) ***Emergency contraceptive method****:* ECP **Provide:** A facility is said to ***provide family planning services*** if the facility reports that it stocks a specific method and makes it available to clients when they visit the facility. Facilities in this category provide family planning methods to clients.
Source	Reproductive Health Supplies Coalition, 2015

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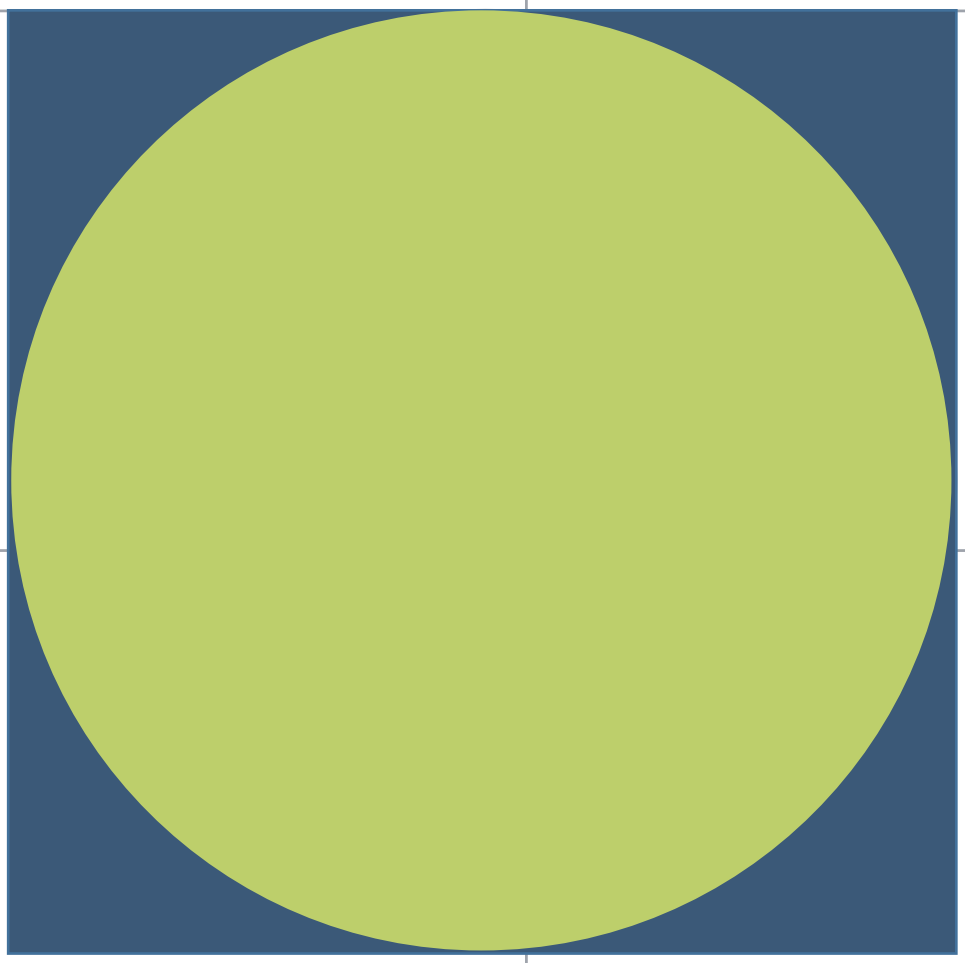

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